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Notice of Allowability	Application No.	Applicant(s)	
	10/691,947	EGGLETON ET AL.	
	Examiner	Art Unit	
	Sung H. Pak	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

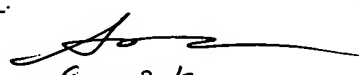
- 1. ☒ This communication is responsive to Amendment filed 7/8/2005.
- 2. ☒ The allowed claim(s) is/are 1-7.
- 3. ☒ The drawings filed on 24 March 2004 are accepted by the Examiner.
- 4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 - 1. ☐ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 - 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
- 7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ul style="list-style-type: none">1. <input type="checkbox"/> Notice of References Cited (PTO-892)2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ul style="list-style-type: none">5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____.7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance9. <input type="checkbox"/> Other _____ |
|---|--|


Sung Pak
Patent Examiner
AU 2874

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Wendy Koba on 8/16/2005.

The application has been amended as follows:

Replace the period ('.') at the end of claim 1 with a semicolon (';') and insert the following on the next line:

-- wherein the sidewalls of the fiber segment are tapered from the center region toward the endfaces to alter the lateral behavior of an optical signal passing through the input and output ports of said tapered sidewalls.--

Cancel claim 8.

The following is an examiner's statement of reasons for allowance:

Microstructured optical fibers, also known as photonic crystal fibers, are well known in the art. Such fibers contain plurality of axially extending regions exhibiting differing refractive indices. Typically, optical signals are introduced at one endface of the fiber and travels axially toward the other end of the fiber. Although introducing light signals on the vertical side wall of

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a optical fiber is known, this is typically carried out during the drawing process in order to determine if the manufactured fiber meets certain manufacturing criteria.

The closest prior art relevant to the claimed invention is the JP 2002-228868 (JP'868) reference, which was cited in the information disclosure statement filed 5/09/2005.

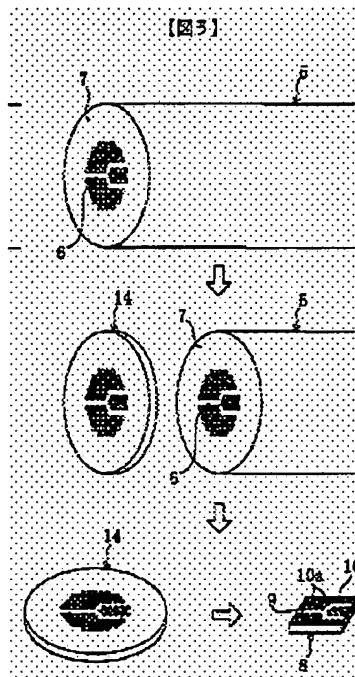


Figure 5 of JP'868 discloses a microstructured fiber that is trimmed such that input and output ports are formed on the “vertical walls” of the fiber. However, none of the prior art, including the JP'868 reference, teaches such microstructured fiber having input and output ports formed on the side walls of the fiber, and wherein the **side walls are tapered from the center region toward the endfaces**. Such feature alters the lateral behavior of the optical signal passing through the input and output ports of the fiber as discussed in the present application. There is no motivation in the prior art to modify the device of JP'868 reference to have tapered side walls, since JP'868 seeks to maintain a constant width and length (see Figure 8).

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (571) 272-2353. The examiner can normally be reached on Monday- Friday, 9AM-5PM.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sung H. Pak
Patent Examiner
Art Unit 2874

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